

#  
5 Suppl. I.P.S.  
3/6/00  
J. Royall  
Attorney Docket No. 48,212-CIP (904)

Ap 2871

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT: Y. Sawayama, et al.

U.S.S.N.: 09/394,327 Art Unit: 2871

FILED: September 13, 1999 Examiner: Unknown

DEC 22 1999

FOR: FRONT-ILLUMINATING DEVICE AND A REFLECTION-TYPE LIQUID  
CRYSTAL DISPLAY USING SUCH A DEVICE

TECHNOLOGY CENTER 2000

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on December 14, 1999.

By: Deborah A. Barfield  
Deborah A. Barfield

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
(SUBMISSION AFTER FILING OF AN APPLICATION  
BUT BEFORE FINAL REJECTION OR NOTICE OF ALLOWANCE)**

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Date: December 14, 1999

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, Applicants hereby submit an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION**

The patents, publications or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

a. X Submitted herewith is a legible copy of (i) each U.S and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

b.        Each of the patents, publications or other information listed on the attached PTO-1449 was previously cited by or submitted to the USPTO in connection with U.S.S.N.: 08/000,000, to which the subject application claims the benefit of the earlier filing date. As such, a copy of each is not included herewith pursuant to 37 C.F.R. § 1.98(d).

III. CONCISE EXPLANATION OF THE RELEVANCE

(check at least one box)

a. X Except as may be indicated below in (b), all of the patents, publications or other information are in the English language or were cited in an English language Search Report, a copy of which is attached hereto (concise explanation not required).

b. X A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:

       English translation for reference(s) \_\_\_\_\_.  
X English abstract for reference B2.  
X English translation of search report/ official communication for reference B2.

c. X The following additional information is provided for the Examiner's consideration:

       Copy of EPO Search Report.  
       Copy of PCT Search Report.  
X Copy of Official Communication from the Taiwanese Patent Office.  
X English translation of search report/ official communication.  
       Copy of \_\_\_\_\_.  
X As to USP 5,608,550 and JP 5-158034, listed in Taiwan Official Communication, see the other Information Disclosure Statement filed herewith.

## **FEES**

IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b)  
(check one box)

- a.  within three months of the filing date of a national application (37 C.F.R. § 1.97(b) (1)). No fee or certification is required.
- b.  within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b) (2)). No fee or certification is required.
- c.  before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b) (3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e)below, or, if no certification has been made, charge our deposit account a fee in the amount of \$230.00 as required by 37 C.F.R. § 1.17(p).

V. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):  
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c) (1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c) (2)).

a. \_\_\_\_\_ No certification; therefore, a fee in the amount of \$230.00 is required by 37 C.F.R. . § 1.17(p).  
or  
b. \_\_\_\_\_ See the certification below. No fee is required.

VI CERTIFICATION UNDER 37 C.F.R. § 1.97(e) (check only one box)

The undersigned hereby certifies that

- a. \_\_\_\_\_ each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- b. \_\_\_\_\_ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

c. X

Some of the items of information (reference A12) were cited in a communication from a foreign Patent Office. As to this information, the undersigned certifies that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS.

VII. FEE PAYMENT (check one)

       Enclosed please find a check in the amount of \$230.00 for the above-indicated fee.

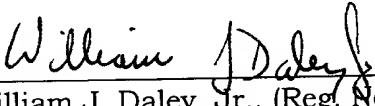
       Please charge Deposit Account No. 04-1105 in the amount of \$230.00 for the above-indicated fee.

X

No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule, with a petition if necessary, and charge the appropriate fee to Deposit Account No. 04-1105.

Respectfully submitted,

  
\_\_\_\_\_  
William J. Daley, Jr., (Reg. No. 35,487)  
DIKE, BRONSTEIN, ROBERTS  
& CUSHMAN, LLP.  
130 Water Street  
Boston, MA 02109  
Tel: (617) 523-3400



Attorney Docket No. 48,212-CIP (904)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT: Y. Sawayama, et al.

U.S.S.N.: 09/394,327 Art Unit: 2871

FILED: September 13, 1999 Examiner: Unknown

FOR: FRONT-ILLUMINATING DEVICE AND A REFLECTION-TYPE LIQUID CRYSTAL DISPLAY USING SUCH A DEVICE

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on December 14, 1999.

By: Deborah A. Barfield  
Deborah A. Barfield

**INFORMATION DISCLOSURE STATEMENT  
(SUBMISSION AFTER FILING OF AN APPLICATION  
BUT BEFORE FINAL REJECTION OR NOTICE OF ALLOWANCE)**

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Date: December 14, 1999

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, Applicants hereby submit an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION**

The patents, publications or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

DEC 22 1999

TECHNOLOGY CENTER 2800

II. COPIES

a.        Submitted herewith is a legible copy of (i) each U.S and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

b.   X   Each of the patents, publications or other information listed on the attached PTO-1449 was previously cited by or submitted to the USPTO in connection with U.S.S.N.: 09/048,527, to which the subject application claims the benefit of the earlier filing date. As such, a copy of each is not included herewith pursuant to 37 C.F.R. § 1.98(d).

III. CONCISE EXPLANATION OF THE RELEVANCE

(check at least one box)

a.        Except as may be indicated below in (b), all of the patents, publications or other information are in the English language or were cited in an English language Search Report, a copy of which is attached hereto (concise explanation not required).

b.   X   A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:

  X   English translation for references B1.\*  
  X   English abstract for references B1.\*  
  X   English translation of search report/ official communication for reference B1.

\*copy submitted in USSN 09/048,527.

c.   X   The following additional information is provided for the Examiner's consideration:

       Copy of EPO Search Report.  
       Copy of PCT Search Report.  
  X   Copy of Official Communication from the Taiwan Patent Office.  
  X   English translation of search report/ official communication.  
       Copy of \_\_\_\_\_.

**FEES**

IV. **THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b)**  
(check one box)

- a.  within three months of the filing date of a national application (37 C.F.R. § 1.97(b) (1)). No fee or certification is required.
- b.  within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b) (2)). No fee or certification is required.
- c.  before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b) (3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e)below, or, if no certification has been made, charge our deposit account a fee in the amount of \$230.00 as required by 37 C.F.R. § 1.17(p).

V. **THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):**  
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c) (1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c) (2)).

- a.  No certification; therefore, a fee in the amount of \$230.00 is required by 37 C.F.R. § 1.17(p).  
or
- b.  See the certification below. No fee is required.

VI. **CERTIFICATION UNDER 37 C.F.R. § 1.97(e)** (check only one box)

The undersigned hereby certifies that

- a.  each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- b.  no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

c. X Some of the items of information (reference A2 and B1) were cited in a communication from a foreign Patent Office. As to this information, the undersigned certifies that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS.

VII. FEE PAYMENT (check one)

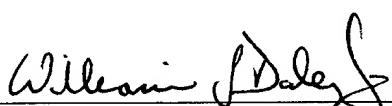
       Enclosed please find a check in the amount of \$230.00 for the above-indicated fee.

       Please charge Deposit Account No. 04-1105 in the amount of \$230.00 for the above-indicated fee.

X No fee is required.

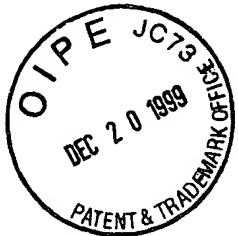
If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule, with a petition if necessary, and charge the appropriate fee to Deposit Account No. 04-1105.

Respectfully submitted,

  
\_\_\_\_\_  
William J. Daley, Jr., (Reg. No. 35,487)  
DIKE, BRONSTEIN, ROBERTS  
& CUSHMAN, LLP.  
130 Water Street  
Boston, MA 02109  
Tel: (617) 523-3400

**Information Disclosure  
Statement**

**PTO - 1449**



Attny. Docket No  
48,212-CIP (904)

Serial No.  
09/394,327

Applicant(s): Y. Sawayama, et al.

Filing Date  
September 13, 1999

Art Unit  
2871

**UNITED STATES PATENT DOCUMENTS**

Exam. Initials	Ref. No.	Document Number	Date	Name	Class	File Date
	A12	4,124,279	11/07/1978	Byles		

**FOREIGN PATENT DOCUMENTS**

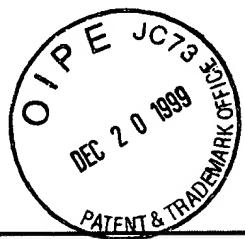
Exam. Initials	Ref. No.	Document Number	Date	Country or Office	Class
	B2	✓ 09102209	04/15/1997	Japan	

**OTHER DOCUMENTS (INCL. TITLE, AUTHOR, DATE, PAGES, ETC)**

Exam. Initials	Ref. No.		

Examiner:

Date:

**Information Disclosure  
Statement**
**PTO - 1449**

 Attny. Docket No  
48,212-CIP (904)

 Serial N  
09/394,327

Applicant(s): Y. Sawayama, et al.

 Filing Date  
September 13, 1999

 Art Unit  
2871

**UNITED STATES PATENT DOCUMENTS**

Exam. Initials	Ref. No.	Document Number	Date	Name	Class	File Date
	A1	5,914,760	06/22/1999	Daiku		
	A2	5,608,550	03/04/1997	Epstein et al.		
	A3	5,640,483	06/17/1997	Lin		
	A4	5,050,946	09/24/1991	Hathaway et al.		
	A5	5,165,772	11/24/1992	Wu		
	A6	5,197,792	03/30/1993	Jiao et al.		
	A7	5,359,503	10/25/1994	Myodo et al.		
	A8	5,772,304	06/30/1998	Smith		
	A9	5,779,338	07/14/1998	Ishikawa et al.		
	A10	5,584,556	12/17/1996	Yokoyama et al.		
	A11	5,046,826	09/10/1991	Iwamoto et al.		

**FOREIGN PATENT DOCUMENTS**

Exam. Initials	Ref. No.	Document Number	Date	Country or Office	Class	
	B1	05158034A	0625/1993	Japan		

**OTHER DOCUMENTS (INCL. TITLE, AUTHOR, DATE, PAGES, ETC)**

Exam. Initials	Ref. No.	
	C1	C.Y. Tai, et al., "A Transparent Frontlighting System For Reflective-Type Displays", <u>SID International Symposium Digest Of Technical Papers, XXVI: 375-378 (1995)</u> .

Examiner:	Date:
-----------	-------